

Applicants: White et al.
Serial No.: 10/761,883
Filing Date: January 20, 2004
Docket No.: EGT-007-1C

Listing of Claims:

This listing of claims replaces all prior versions and listings of claims in the application.

Listing of Claims

1. (previously presented) An unsolicited message rejecting communications processor connected to message transfer agents

MTA_0 with an Internet address of IP_0, sender_address A_0, declared domain of D_0, and real domain of DD_0, and

MTA_1 with an Internet address of IP_1 and recipient A_1

comprising:

- a) monitoring means for monitoring the communications between MTA_0 and MTA_1;
- b) determining means for determining if the communications contains an unsolicited message; and
- c) intercepting means for intercepting a RCPT command from MTA_0 and sending an error reply to MTA_0 if the message is determined to be unsolicited,

whereby MTA_1 controls the interaction between MTA_0 and MTA_1 before a RCPT command from MTA_0 is received by the unsolicited message rejecting communications processor and whereby the connection with MTA_0 is rejected by the intercepting means before the data portion of the unsolicited message is transmitted.

2. (previously presented) The unsolicited message rejecting communications processor in Claim 1, further includes an allow_address database and wherein the determining means determines if a message is not unsolicited by checking if the IP_0 is in the allow_address database.

Applicants: White et al.
Serial No.: 10/761,883
Filing Date: January 20, 2004
Docket No.: EGT-007-1C

3. (previously presented) The unsolicited message rejecting communications processor in Claim 1, further includes a prevent_address database and wherein the determining means determines if a message is unsolicited by checking if IP_0 is in the prevent_address database.

4. (previously presented) The unsolicited message rejecting communications processor in Claim 1, further includes access to a open relay database and wherein the determining means determines if a message is unsolicited by checking if IP_0 is in the open relay database.

5. (previously presented) The unsolicited message rejecting communications processor in Claim 1, further includes access to a DNS (domain name server) database and wherein the determining means determines if a message is unsolicited by checking if IP_0 has a domain name entry DD_0 in the DNS database.

6. (previously presented) The unsolicited message rejecting communications processor in Claim 1, further includes a bad_from database and wherein the determining means determines if a message is unsolicited by checking if the sender_address A_0 is in the bad_from database.

7. (previously presented) The unsolicited message rejecting communications processor in Claim 1, further includes a suspect_domain database and wherein the determining means determines if a message is unsolicited by checking if the real domain DD_0 matches the domain of sender_address A_0 and the domain of sender_address A_0 is in the suspect_domain database.

8. (previously presented) The unsolicited message rejecting communications processor in Claim 1, wherein the determining means determines if a message is

Applicants: White et al.
Serial No.: 10/761,883
Filing Date: January 20, 2004
Docket No.: EGT-007-1C

unsolicited by checking if the sender_address A_0 matches the recipient (A_1).

9. (previously presented) The unsolicited message rejecting communications processor in Claim 1, further includes a no_filter database and wherein the determining means determines if the message is to be blocked if it is determined to be unsolicited by checking if the recipient A_1 is in the no_filter database.

10. (previously presented) The unsolicited message rejecting communications processor in Claim 1, wherein the determining means determines if a message is unsolicited by checking if the declared domain D_0 of MTA_0 is the same as the domain D_1 of MTA_1.

11. (previously presented) The unsolicited message rejecting communications processor in Claim 1, wherein the determining means determines if a message is unsolicited by checking if the declared domain D_0 of MTA_0 does not match the real domain DD_0 and the declared domain D_0 is in the suspect_domain database.

12. (previously presented) The unsolicited message rejecting communications processor in Claim 1, further includes a rejected_connection database which logs the time, sender_address A_0, recipient A_1, and the reason for the rejection if a message is rejected if the message is determined to be unsolicited.

13. (previously presented) The unsolicited message rejecting communications processor in Claim 1, further includes an allowed_connection database which logs the time and recipient A_1 if the message is determine not to be unsolicited.

Applicants: White et al.
Serial No.: 10/761,883
Filing Date: January 20, 2004
Docket No.: EGT-007-1C

14. (previously presented) A method for a receiving networked computer system with an Internet connection, a mail transport agent MTA_1, an Internet address IP_1, recipient A_1, and an operating system capable of executing the method to reject unsolicited messages from a transmitting networked computer system with an Internet connection and a message transfer agent MTA_0, an Internet address IP_0, sender_address A_0, declared domain D_0, and real domain DD_0 comprising the steps of:

- a) waiting for a new SMTP connection request;
- b) relaying and monitoring the replies from MTA_0 to MTA_1;
- c) relaying replies from MTA_1 to MTA_0;
- c') allowing MTA_1 to control the interaction between MTA_0 and MTA_1 until a RCPT reply is received from MTA_0;
- d) intercepting the RCPT reply from MTA_0 to MTA_1;
- e) determining if the message is unsolicited by analyzing the monitored replies;
- f) releasing the intercepted RCPT reply if the message is determined not to be unsolicited;
- g) sending an error reply to MTA_0 if the message is determined to be unsolicited; and
- h) rejecting the connection with MTA_0 before the data portion of the unsolicited message is transmitted if the message is determined to be unsolicited.

15. (previously presented) A method for a receiving networked computer system with an Internet connection, a mail transport agent MTA_1, IP address IP_1, a domain name D_1, a recipient, A_1, an allow_address database, a prevent_address database, a suspect_domain database, a bad_from database, a no_filter database, a rejected_connection database, an allowed_connection database, and an operating system capable of executing the method

Applicants: White et al.
Serial No.: 10/761,883
Filing Date: January 20, 2004
Docket No.: EGT-007-1C

to reject unsolicited messages from a transmitting networked computer system with an Internet connection, a message transfer agent MTA_0, an IP address of IP_0, a declared domain name D_0, a real domain name DD_0, and a sender address of A_0 comprising the steps of:

- a) waiting for a SMTP connection request on the receiving networked computer system's Internet connection;
- b) sending a 220 reply to MTA_0 to acknowledge the requested connection;
- c) extracting IP address IP_0 from the connection request;
- d) testing if the DNS database has a domain name DD_0 for IP_0;
- e) testing if IP_0 is in an open relay database;
- f) testing if IP_0 is in the allow_address database;
- g) testing if IP_0 is in the prevent_address database;
- h) requesting a connection with MTA_1;
- i) waiting for a 220 reply from MTA_1 to acknowledge the requested connection;
- j) waiting for a reply from either MTA_0 or MTA_1;
- k) jumping to step n) if the reply is not from MTA_1;
- l) relaying the reply from MTA_1 to MTA_0;
- m) jumping to step j) to wait for a new reply;
- n) jumping to step t) if the reply from MTA_0 is not a **HELO**;
- o) extracting domain D_0 from the reply;
- p) testing if declared domain D_0 of MTA_0 matches domain D_1 of MTA_1;
- q) testing if declared domain D_0 does not match real domain DD_0 of MTA_0 AND declared domain D_0 is in the suspect_domain database;
- r) relaying the HELO reply from MTA_0 to MTA_1;
- s) jumping to step j) to wait for a new reply;
- t) jumping to step z) if reply from MTA_0 is not a **MAIL**;
- u) extracting sender_address A_0;

Applicants: White et al.
Serial No.: 10/761,883
Filing Date: January 20, 2004
Docket No.: EGT-007-1C

- v) testing if A_0 is in the bad_from database;
- w) testing if DD_0 does not match the domain of A_0 and the domain of A_0 is in the suspect_domain database;
- x) relaying MAIL reply to MTA_1;
- y) jumping to step j) to wait for a new reply;
- z) jumping to step kk) if reply from MTA_0 is not a **RCPT**;
- aa) extracting recipient A_1;
- bb) testing if A_1 is in no_filter database;
- cc) testing if A_0 matches A_1;
- dd) jumping to step hh) if NOT(t_allow OR t_no_filter OR NOT (t_prevent OR t_open OR t_DD) OR t_bad_from OR t_suspect_domain OR t_to_from OR t_echo_domain OR t_forged_domain);
- ee) logging time and recipient A_1 in the allowed_connection database;
- ff) relaying RCPT reply to MTA_1;
- gg) jumping to step j) to wait for a new reply;
- hh) logging the time, from-address sender_address A_0, recipient A_1, and the reason for rejecting the connection in the rejected_connection database;
- ii) rejecting the connection to MTA_0 by sending a 550 reply to MTA_0;
- jj) jumping to step j) to wait for a new reply;
- kk) jumping to step vv) if reply from MTA_0 is not **DATA**;
- ll) relaying DATA reply to MTA_1;
- mm) waiting for a 354 reply from MTA_1;
- nn) relaying the 354 reply from MTA_1 to MTA_0;
- oo) waiting for the data from MTA_0;
- pp) relaying the data from MTA_0 to MTA_1;
- qq) waiting for a .\r\n from MTA_0;
- rr) relaying the .\r\n from MTA_0 to MTA_1;
- ss) waiting for a 250 reply from MTA_1;
- tt) relaying the 250 reply to MTA_0;
- uu) jumping to step j) to wait for a new reply;

Applicants: White et al.
Serial No.: 10/761,883
Filing Date: January 20, 2004
Docket No.: EGT-007-1C

vv) jumping to step yy) if reply from MTA_0 is not **RSET, SEND, SOML, SAML, VRFY, NOOP, EXPN, HELP, or TURN**;

ww) relaying reply to MTA_1;

xx) jumping to step j) to wait for a new reply;

yy) jumping to step ddd) if reply from MTA_0 is not a **QUIT**;

zz) relaying the QUIT reply to MTA_1;

aaa) waiting for 221 reply from MTA_1;

bbb) relaying 221 reply from MTA_1 to MTA_0;

ccc) jumping to step a) to wait for a new connection;

ddd) sending a 500 reply to MTA_0 to signal a syntax error; and

eee) jumping to step a) to wait for a new connection, wherein t_allow represents the results of the testing in step (f); t_no_filter represents the results of the testing in step (bb); t_prevent represents the results of the testing in step (g); t_open represents the results of the testing in step (e); t_DD represents the results of the testing in step (d); t_bad_from represents the results of the testing in step (v); t_suspect_domain represents the results of the testing in step (w); t_echo_domain represents the results of the testing in step (p); t_to_from represents the results of the testing in step (cc); and t_forged_domain represents the results of the testing in step (q).

16. (previously presented) The method of claim 14, wherein the determining comprises checking if the IP_0 is in a allow_address database.

17. (previously presented) The method of claim 14, wherein the determining comprises checking if IP_0 is in a prevent_address database.

18. (previously presented) The method of claim 14, wherein the determining comprises checking if IP_0 has a domain name entry DD_0 in a DNS database.

Applicants: White et al.
Serial No.: 10/761,883
Filing Date: January 20, 2004
Docket No.: EGT-007-1C

19. (previously presented) The method of claim 14, wherein the determining comprises checking if the real domain DD_0 matches the domain of sender_address A_0 and the domain of sender_address A_0 is in a suspect_domain database.

20. (previously presented) The method of claim 14, wherein the determining comprises checking if the declared domain D_0 of MTA_0 does not match the real domain DD_0 and the declared domain D_0 is in the suspect_domain database.